# BioCanRx
## Canada's Immunotherapy Network
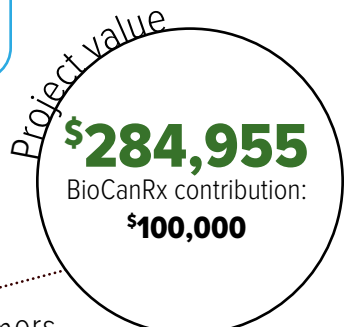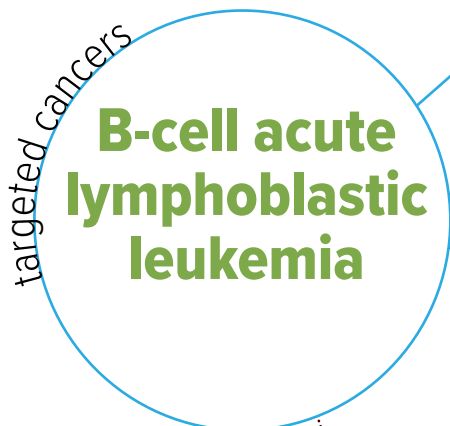## Le réseau canadien d'immunothérapie

# CSEI Program

**Using real-world data and iterative economic evaluation to prioritize resource allocation for care and research in adult patients with relapsed/refractory B-cell acute lymphoblastic leukemia**

April 1, 2019 – June 30, 2022

## Highlights

- Will assess the cost-effectiveness of CAR T-cell therapy among adults with relapsed or refractory (r/r) B-cell ALL at an early stage of product development.

- Will assess whether it is feasible to integrate real-world data, including Ontario's health administrative and registry data to inform the economic evaluation of CAR T-cell therapies.

- Will develop a framework to engage stakeholders in economic evaluations.

targeted cancers

### B-cell acute lymphoblastic leukemia

Project value

**$284,955**
BioCanRx contribution:
**$100,000**

Partners

**4**

The Ottawa Hospital Foundation | L'Hôpital d'Ottawa Fondation

OICR Ontario Institute for Cancer Research

IC/ES Data Discovery Better Health

OTTAWA METHODS CENTRE ©

Patient Partners

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## About the project

In the treatment of cancer, there are new therapies being discovered that use a cancer patient's own immune cells to fight the cancer, generally known as immunotherapy. The therapy relies on a complicated manufacturing process that involves collecting a patient's cells and then re-engineering them to attack cancer cells. This process can be long and costly, often having a high rate of failure to receive regulatory approval.

To better understand the factors contributing to the cost of this expensive treatment, the potential clinical benefits of the treatment, and what the health system can afford, we will apply a continuous economic evaluation framework to Chimeric Antigen Receptor (CAR)T-cell therapy that has just been approved in Canada for advanced leukemia butdoes not yet have a funding mechanismin Ontario.

Our process will actively involve multiple partners, including patients, CAR-T developers, clinicians, researchers and healthcare payers. The results of the proposed study will help facilitate realistic commercial valuation of CAR T-cell therapy and assist public payers in setting a price of CAR T-cell therapy based on the additional benefit gained and the other associated costs of the treatment.
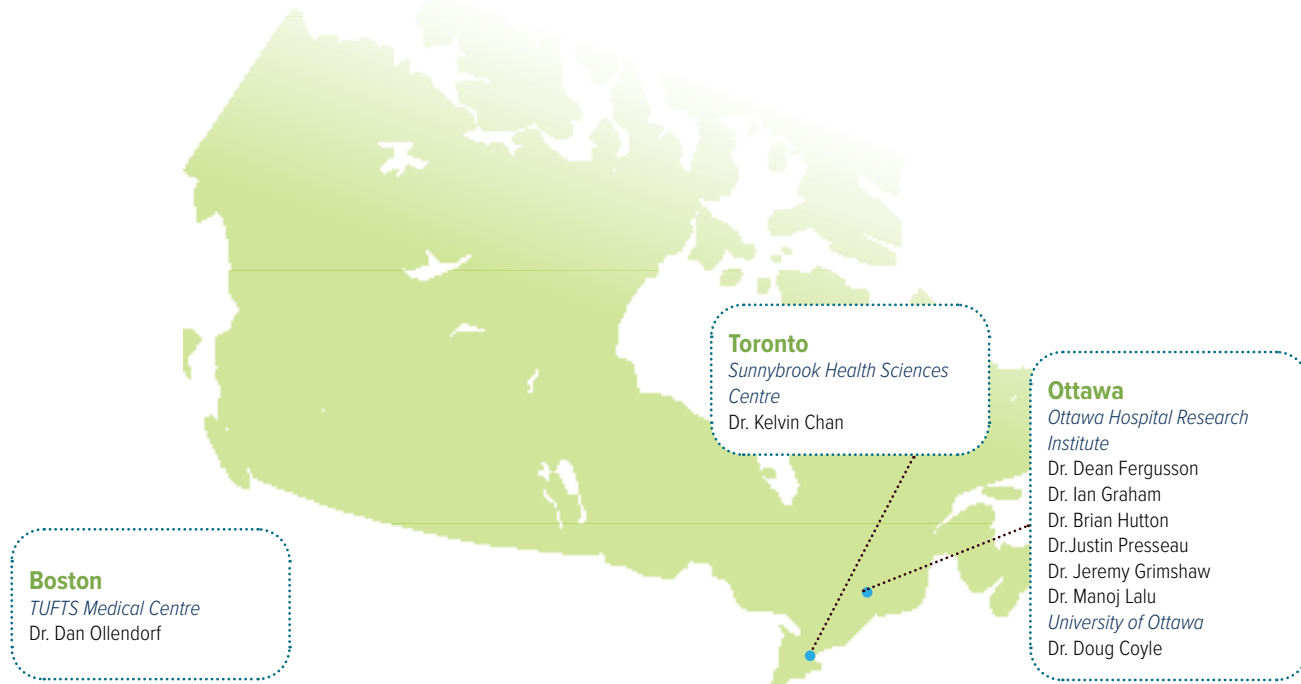
Key investigators

**Project lead:**

Dr. Kednapa **Thavorn**

**Principal Investigators**

Dr. Natasha **Kekre**

Dr. Harry **Atkins**

The Ottawa Hospital Research Institute

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Dr. Jeremy Grimshaw
Dr. Manoj Lalu
*University of Ottawa*
Dr. Doug Coyle

**Boston**
*TUFTS Medical Centre*
Dr. Dan Ollendorf

**Key Milestones**

**2019-2020**
- Systematic review of economic evaluation of CAR T-cell therapies

**2020-2021**
- Economic evaluation model developed

**2020-2021**
- Framework for stakeolder engagement in economic evaluations

**Partners**

Ontario Institute for Cancer Research - $184,955

The Ottawa Hospital Foundation

ICES

Ottawa Methods Centre

# The power to kill cancer lies within us. Let's tell our bodies how.

**BioCanRx**
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